

CENTRAL INTELLIGENCE AGENCY

## 683

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(LISTED BELOW) \* (1 blueprint)

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1. a. The Leuna Plant, named "Chemical Works Leuna", a Soviet Corporation plant, now has, as formerly, about thirty thousand employees working in three 12-hour shifts (after each shift the workers have a 24-hour rest). The ratio between the production workers and repair workers is 1:1. This indicates decreased production and poor efficiency. +

b. Fertilizer is produced on the basis of ammonia-sulphate-ammonium sulphate. The yearly production of about 180,000 tons of nitrogen makes production of about 400,000 tons of fertilizer possible. ++

About 30,000 tons of methanol and isobutyl are produced annually in one or two furnaces. The "Organic Section" produces phenol, zyklohexanol and lactam and, finally, soap and soap powder on a cocasine basis.

c. The hydrogenation plant has not been used since 1947 when the supply of tar in the tar pools was exhausted. The tar distillation plants which supplied the tar, although they do not belong to the Leuna Plant, were not yet ready for operation or were unable to deliver for other reasons. Some of these tar factories are located in ESPENHAIN (N 52/K 29), BOEHLER (N 52/K 29), the Leopold Mine, JOELFERSHEIM near FRANKFURT/Main, the Messel Mine near DARMSTADT. It was planned to resume hydrogenation on the tar basis in mid-February 1949 after the delivery firms (as far as they are located in the Soviet Zone) have at least partly resumed tar production. +++

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as the coal dressing installations were not yet serviceable. It is hoped that repairs on two coal chambers will be completed in May 1949. A monthly production of about 5,000 tons is then expected.

d. Dismantling: About 30 percent or 120,000 tons of machines plus about 40,000 tons of piping of all installations, were dismantled in 1946, viz: ØØ

(1) From the power plant: Eight high pressure boilers for the production of about 400 tons of steam per hour at 120 atmospheres and a weight of about 25,000 tons, two turbines of 10,000 kw each. It was rumored that four high pressure boilers and both turbines were sent to TACHKENT and the other four boilers to the Donets Basin.

(2) The nitric acid plant for the production of native gases such as krypton, neon etc. and the plant for the production of heavy water were totally dismantled.

(3) From the hydrogenation plant only the high pressure coverings (for about 200 atmospheres), and the low pressure installations for the production of hydrogen - hydrogen carbon oxide - nitrogen were dismantled. Ø

The selection of the dismantled items revealed excellent planning by the Soviets. The plant for heavy water and native gases and the dismantling of the plant for nitric acid may indicate that the Soviets intend to use nitric acid as a rocket weapon fuel, possibly for long-range antiaircraft rockets of the German V-2 type. The dismantling of the hydrogen installations does not conclusively indicate that the Soviets are going to produce multiple stage-rockets fueled with liquid hydrogen. The usage of liquid hydrogen is far more complicated than that of liquid oxygen and, furthermore, hydrogen can also be used for a great many other chemical processes. Ø

It is noteworthy that the Soviets did not dismantle the hydrogenation installations proper, but were satisfied with the high pressure coverings. This confirms some reports stating that the Soviets are well familiar with low pressure hydrogenation.

(4) The dismantling was effected as follows: The monthly inventory reports of all plant were submitted to the Soviets. On the basis of these reports they apparently compiled a complete and comprehensive dismantling list in RUSSIAN. All devices were then carefully dismantled, numbered, tightly packed and shipped with correct shipping lists via CETERIN.

The widely held opinion that all dismantlings were effected in a disorderly manner is disproved by this report on the dismantling in Louna, which indicates that it may be possible to re-establish efficient installations with the dismantled machinery.

e. Deportation of Experts: About 30 top experts who had been compulsorily contracted were deported in October 1946; most of them were with their families. These experts included:

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- (1) Dr. Herold, chief of the experimental section of Leuna, and his assistants.
- (2) Dr. Asinger
- (3) Dr. Smeykalz
- (4) Dr. Otto, chief of the design office
- (5) Dr. Gericke, expert on lubricating oil
- (6) Dr. Meier, expert on organic chemistry
- (7) Dr. Kaufmann, fuel specialist (refining of low-octane rating gasoline into aviation gasoline)
- (8) Dr. v.d. Horst, assistant to Dr. Kaufmann
- (9) Dr. Wyschomirsky, chief of material test installation
- (10) Dr. Gemassmer, specialist on fatty acids
- (11) Dr. Geib, chief of the heavy water section
- (12) Dr. Scheuer, physicist (measuring technique, heavy water)
- (13) Dr. Pohl, specialist on fuels and acetylene
- (14) Dr. Eckhold
- (15) Graduate Engineer Scholtz, test stands for fuels, specialist on motor fuels.

Most of these experts were first sent to Moscow where they were almost ceremoniously received. Some were later transferred to Leningrad, others to Gorki via Leningrad. From dependable reports it was learned that Dr. Gericke and Dr. Herold are living in Gorki and Dr. Scholz and Dr. Wyschomirsky in Leningrad.

f. It was especially noted that the Soviets made Dr. Becker and Dr. Schrader examine coal samples from the Kuznets Basin to determine whether this coal is suitable for hydrogenation. It may be mentioned that gasoline derived from coal yields the best aviation gasoline. Dr. Becker, in whom the Soviets are highly interested, escaped to the Western Zones.

g. The Soviets exerted great efforts to obtain the services of Dr. Novotny, an expert on high-percentage hydrogen peroxide. This attempt may indicate that the Soviets intended to produce long-range antiaircraft rockets fueled with hydrogen peroxide and potassium permanganate or sodium permanganate. Hydrogen peroxide, with potassium permanganate or sodium permanganate "Aurol" is also used as fuel for Walther turbines installed in Walther submarines.

h. Leading individuals in the present Leuna Plant management are:

- (1) Dr. Eckhard, general manager
- (2) Dr. Sunthoff, production manager
- (3) Dr. Ober, production manager.

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#### February 1949

2. a. Working conditions: Work is done in three shifts. The shifts are from 7:30 a.m. to 4:40 p.m., 6 a.m. to 6 p.m. and from 6 p.m. to 6 a.m. There were about 28,000 employees until 24 January 1949. Five thousand workers were dismissed on 25 January and an equal number on 26 January 1949.

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## b. Personnel:

(1) PACHLANHOV (phonetic spelling) is Soviet general manager.

He lives at 24 Erich Senelstrasse, LEUNA and uses [redacted] 25X1

[redacted] the only vehicle stationed in LEUNA. All other cars [redacted] and [redacted] parked in the garage at [redacted] 25X1  
the gasoline station on Mersburgerstrasse, LEUNA.

(2) Dr. ECHARD, residing at 5 Preussenstrasse, LEUNA, is the German manager. 25X1



c. See plant layout and pertinent legend.

November 1948

3. a. About three-fourths of the 23 plant experts who were deported to the Soviet Union in October 1946 were chemists, the others had been on the designing staff. After arrival in the Soviet Union they were distributed as follows:  
About one-third to

- (1) Leningrad
- (2) Harpov Institute, Moscow
- (3) GURKI.

The experts transferred to Moscow were again subdivided into two about equal groups, one going to GURKI in April 1948, the other to LITOMAN. Dr. ACHOS, formerly chief chemist at Leuna, and Dr. HAROLD were among those transferred to GURKI. Letters which Dr. ACHOS wrote to his wife reveal with surprising frankness that the living conditions of these experts who are, together with their families, deported to the Soviet Union, were extremely unfavorable. This was also implied by Dr. ACHOS' repeated warnings to his wife not to come to the Soviet Union. He was very happy that she was again in Austria.

b. No new machinery or other production means have been installed in the Leuna Plant since 1945. Only reconditioning and repair work has been done.

c. A number of prominent geologists who are not active at present are assigned to the Leuna Plant.

4. An experimental section concerned with research work in the field of heavy water is attached to the Leuna Plant. It is housed in building "219" situated on a dump (see attached sketch). Intensive work is being done there, but no heavy water is now produced. The production installations were dismantled by the Soviets in 1946 and have not been rebuilt.

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## Comment:

- + 1. The unfavorable proportion between the number of production and repair workers (1:1) shows that the firm was unable to make up the losses caused by bomb damage and Soviet dismantling, and is still in a state of reconstruction. The plant is still working with a deficit. In 1947 the plant required a five million Reichsmark monthly subsidy from public finances. The Soviet Corporation plant is now Soviet state property but these allowances must be paid from German taxes.
- ++ 2. The yearly production of 400,000 tons of fertilizer (ammonium-sulphate) is 53,000 tons lower than prescribed by the official 1949 production plan. 450,000 tons of these 453,100 tons are to be produced by the "Louna" Soviet Corporation Plant and 3,100 tons by nationalized plants. The production of methanol as scheduled for 1949 amounts to 15,000 tons (1,000 tons less than in 1948). Since the production of methanol plus isobutyl for 1949 is indicated at 30,000 tons, a 15,000-ton production of isobutyl must be assumed. The prescribed quota for lactam (an intermediate product for a nylon-like artificial fiber) amounts to 650 tons. The latter three products are almost exclusively delivered to the "Buna" Soviet Corporation Plant, JOUKOPAU, and to the "Kautsk" Soviet Corporation Plant, BITTER-FELD.

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- +++ 3. [redacted] the heavily dismantled hydrogenation plant was in operation up to the end of 1947 (x). The hydrogenation was said to have been suspended during the first quarter of 1948 and was to be resumed in the second quarter of 1948 to reach approximately 6,000 tons per month at the end of 1948. The hydrogenation on the browncoal tar basis was to be resumed in mid-February 1949 and the hydrogenation on the browncoal basis after the reestablishment of the coal dressing plant in May 1949. The total capacity for the production of fuel must therefore be rated at 15,000 tons from mid-1949 on (10,000 tons from browncoal tar and 5,000 tons from browncoal).

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4. The statements that no new production means are installed and only rebuilding and reconditioning is being done, was confirmed [redacted].
5. The information that there is a pilot plant which is engaged in the field of heavy water has been reported for the first time and requires confirmation.
6. The capacity of the main production branches was as follows in 1943:

Gasoline and Diesel oil:	600,000 tons per year
Primary nitrogen:	300,000 tons per year
Methanol and higher alcohol:	200,000 tons per year
Mersol	50,000 tons per year
Sulphuric acid	20,000 tons per year.

00 The losses caused by the dismantling can be assumed as approximately 50 percent instead of 30 percent as indicated in the report.

1 Annex: "Louna" Soviet Corporation Plant (Blueprint with Legend)

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